

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010266**Date Inspected:** 30-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. You qi guo**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance(QA) Inspector, Baskar Govindarajan, was present during the times noted above for observations relative to the work being performed.

Trial assembly area (Heavy dock jetty)

1.This QA inspector, Baskar Govindarajan, observed, ZPMC qualified welding personnel identified as 049220 perform FCAW repair welding on, base plate to Skin D stiffener, South tower, lift 1 .The weld joint identified as SSD1- A111 B/H- 50. ZPMC CWI Identified as Mr. You qi guo. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-2G (2F) -repair.

2.This QA inspector, Baskar Govindarajan, observed, ZPMC qualified welding personnel identified as 059525 perform FCAW welding on, base plate to Skin C stiffener, East tower, lift 1 .The weld joint identified as ESD1- A167- B/H- 66. ZPMC CWI Identified as Mr. You qi guo. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2332-TC-P5-F

3.This QA inspector, Baskar Govindarajan, observed, ZPMC qualified welding personnel identified as 069118 perform FCAW welding on, base plate to Skin C stiffener, inside East tower, lift 1 .The weld joint identified as ESD1- A167- B/H- 138. ZPMC CWI Identified as Mr. You qi guo. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2332-TC-P5-F

4.This QA inspector, Baskar Govindarajan, observed, 6 mm transverse indication in East tower, lift 3, 89 mtr. Top

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diaphragm, Skin E, DE corner. The weld joint identified as ESTL3- 4 D/K-31. Incident reported.

### Magnetic Particle Testing:

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-6028 MT report for this date. The member is identified as East tower, Lift 3, 89 mtr. Fit lugs and diaphragm to Skin A, B, C, D and E. The weld designations reviewed are as follows:

ESTL3- 4 D/K – Jt. nos. 44,45,57,60,61,82,83,20,26,27,31–Skin A,B,C,D,E fit lugs  
ESTL3-4 C/K–Jt.nos. 40,41,28,29 –AE and DE corner back fill plate  
ESTL3-4 D/K–Jt.nos. 40,39,28,29 –AE and DE corner back fill plate  
ESTL3- 4 C/K – Jt. nos. 45,46,33,34,87,88 –Skin A& E to diaphragm

### Ultrasonic Testing:

This QA inspector, Baskar Govindarajan, performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted at Tower components by ZPMC Quality Control personnel. This QA Inspector generated a TL-6027 UT report for this date. The member is identified as East tower, Lift 3, bracing plates, 89 mtr. Elevation and 89 mtr. Back fill plates of machining area. The weld designation reviewed is as follows:

ESTL3-4 C/K- Jt. no. 96, 97 – East tower, lift 3  
ESTL3-4 C/K- Jt. no. 39, 27 – East tower, lift 3 –AE & DE corner backfill plate  
ESTL3-4 D/K- Jt. no. 38, 30 – East tower, lift 3 –AE & DE corner backfill plate

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge, Sinevod - 134-8257-0045, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Baskar,Govindarajan	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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